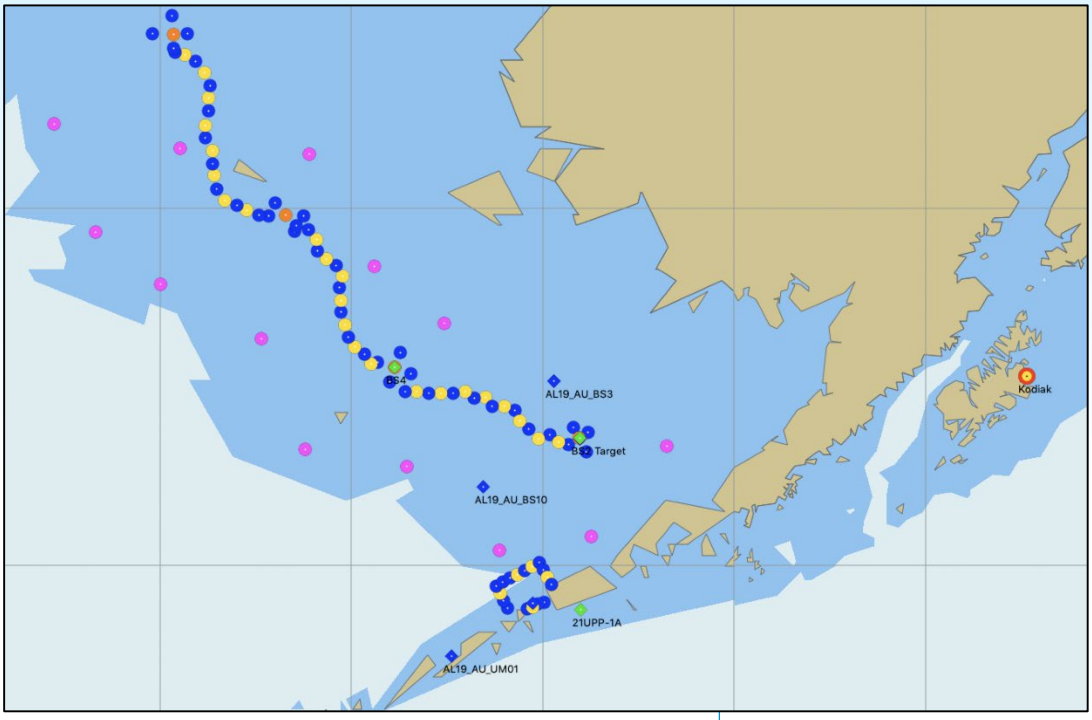
NOAA FISHERIES
National Marine Fisheries Service
Alaska Fisheries Science Center

Research Brief

2021 EcoFOCI Spring Mooring Cruise and Hydrographic Survey DY21-03

May 1-20, 2021



Map showing the overall working area for the DY21-03 cruise. Blue circles are CTD/Bongo stations; yellow circles are CTD only stations; the two orange circles are box center stations with CTD, Bongos and CalVETs. The green diamonds are PMEL mooring locations, blue diamonds are MML mooring locations and pink circles are PUF mooring sites.

Who is conducting the research?

Scientists from the Alaska Fisheries Science Center's RACE Division and Marine Mammal Lab, as well as NOAA's Pacific Marine Environmental Lab (PMEL), with colleagues from the University of Alaska Fairbanks, aboard the NOAA ship *Oscar Dyson.*

What is the research objective?

The overall research objective is to determine how varying biological and physical factors influence the Bering Sea marine ecosystem. The objectives of the survey are: 1) service oceanographic and passive acoustic moorings that measure water column and sea ice properties and detect marine mammals and sounds from human activities; 2) sample the water column for zooplankton, larval fish, and bottom-dwelling organisms; 3) deploy drifters to measure currents; and 4) deploy sonobouys to monitor marine mammal presence in real time.

Where is the research being conducted?

The survey will begin and end in Kodiak, AK. The primary operating area includes the Bering Sea, from St. Lawrence Island to the north, south to the Aleutian Chain and Unimak Pass, from 177W to 163W.

Why are the data important? How will data be used?

These data contribute to an ongoing multi-decadal research program dedicated to understanding and predicting the dynamic relationships among climate, fisheries, and the marine environment to ensure sustainability of Alaskan living marine resources and healthy ecosystems. The data collected during these surveys and the resulting information will be applied to fisheries resource management, and used to inform stock assessment reports, environmental prediction models, and future trends in fisheries yield.

Schedule for the 2021 EcoFOCI spring mooring cruise

14-day Seattle-based Shelter In Place (SIP) and COVID-19 testing begins	April 1
Science Team flies to Kodiak, AK	April 15
14-day SIP and COVID-19 testing	April 15-29
Science Team boards ship and enters “bubble” in Kodiak	April 29
Loading for cruise occurs on the dock within the “bubble”	April 29-30
Survey operations begin	May 1
Survey operations end in Kodiak, offload and demobilize gear	May 20
Science Team travels Kodiak-Seattle by air	May 21
Science Team post-travel SIP	May 21-June 4

What steps are you taking to prevent spread of COVID-19? (bulleted list, cite only high level activities from SOP)

- Crew and scientists shelter-in-place for 14 days before flying, for 14 days upon arrival at the port of embarkation, and take two COVID-19 tests prior to embarking the survey vessel.
- Crew and scientists self-monitor for COVID symptoms during the survey and follow rules regarding personal infection controls (masking, hygiene, distance where possible, etc.) and disinfection of surfaces while aboard.
- All hands aboard the vessel maintain a 'bubble' of isolation from outside contact until the survey is completed.
- All crew and scientists shelter-in-place for 7-14 days after travel before resuming work activities

How do you plan to communicate research results? (e.g., outreach document, webstory, radio interview, community meeting, etc.)

The project PIs will present their results virtually to interested members of Alaskan communities and the public. A short written summary of preliminary results will also be available to the public after the survey end. Final results will also be presented at conferences (e.g., Alaska Marine Science Symposium), symposiums, and seminars, and research meetings.

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